

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,505	01/16/2004	Guillermo C. Bazan	LA-1279-400-C1US	7669
	EXAMINER			
			THOMPSON, CAMIE S	
	treet		ART UNIT	PAPER NUMBER
Los Angeles, CA 90013			1774	
		•		
			MAIL DATE	DELIVERY MODE
•		· •	07/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
	10/759,505	BAZAN ET AL.			
Office Action Summary	Examiner	Art Unit			
	Camie S. Thompson	1774			
The MAILING DATE of this communication apperiod for Reply	pears on the cover sheet wit	h the correspondence address			
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNIC 136(a). In no event, however, may a re will apply and will expire SIX (6) MONT e, cause the application to become ABA	ATION. ply be timely filed "HS from the mailing date of this communication. ANDONED (35 U.S.C. § 133).			
Status	·				
1) Responsive to communication(s) filed on Ame	endment filed April 27, 2007				
2a)☐ This action is FINAL . 2b)☒ This	This action is FINAL . 2b)⊠ This action is non-final.				
•	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
closed in accordance with the practice under l	Ex parte Quayle, 1935 C.D.	11, 453 O.G. 213.			
Disposition of Claims					
4)⊠ Claim(s) <u>4,5,12-15 and 18-22</u> is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) 20-22 is/are allowed.					
6) Claim(s) <u>4,5 and 12-14</u> is/are rejected.					
7) Claim(s) <u>15</u> is/are objected to.					
8) Claim(s) are subject to restriction and/o	or election requirement.				
Application Papers					
9)☐ The specification is objected to by the Examine	er.				
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11)☐ The oath or declaration is objected to by the E	xaminer. Note the attached	Office Action or form PTO-152.			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreigna) All b) Some * c) None of:	n priority under 35 U.S.C. §	119(a)-(d) or (f).			
1. Certified copies of the priority document	ts have been received.				
2. Certified copies of the priority document	•				
3. Copies of the certified copies of the prior		received in this National Stage			
application from the International Burea		and the state of			
* See the attached detailed Office action for a list	or the certified copies not r	eceivea.			
Attachment(s)					
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) 		ummary (PTO-413) /Mail Date			
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date		formal Patent Application			

Application/Control Number: 10/759,505

Art Unit: 1774

DETAILED ACTION

Page 2

1. Applicant's amendment and accompanying remarks filed April 27, 2007 are acknowledged.

- 2. Examiner acknowledges newly added claims 20-22.
- 3. The rejection of claims 4-5, 12-15 and 18-19 under 35 U.S.C. 102(e) as being anticipated by Toguchi et al., U.S. Patent Number 6,582,837.

Claim Objections

4. Claims 4-5, 12-15, 18-19 and 20-22 are objected to because of the following informalities: The term "binaphthyl" is mispelled. Appropriate correction is required.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 4-5, 12-14 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toguchi et al., U.S. Patent Number 6,582,837.

Toguchi discloses an organic electroluminescence device having one or more organic thin layers including a luminescent layer between an anode and a cathode wherein at least one of the organic thin layers includes a binaphthyl compound such as

Application/Control Number: 10/759,505 Page 3

Art Unit: 1774

The reference reads on the instant claims when $R_2^{\ 1}$ to $R_2^{\ 14}$ represents hydrogen, a substituted or unsubstituted alkoxy group, an aromatic hydrocarbon and aromatic heterocycle (see column 11, line 20-column 12, line 54). The figures in the reference disclose an electron-transporting layer (hole blocking layer) sandwiched between the luminescent layer and the cathode. The Toguchi reference reads on instant claims 4-5 when $R_2^{\ 1}$ and $R_2^{\ 8}$ of the reference are alkoxy groups (or hydrogen for instant claims 18-19) and n^1 and n^2 of the instant claims are zero and Ar^1 and Ar^2 are an aromatic hydrocarbon. Therefore, it would have been obvious to apply the substitutions as required by the instant claims in order to have improved luminance. Toguchi clearly renders the binaphthyl compounds of the present claims obvious.

7. Claim 15 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art does not provide for the recited organic electroluminescence device, further including hole blocking layer between the emissive layer and the cathode wherein the hole blocking layer comprises

Application/Control Number: 10/759,505

Art Unit: 1774

8. Claims 20-22 are allowed. The prior art does not provide for the recited binaphthyl compounds as claimed in claims 20-22.

Response to Arguments

9. Applicant's arguments with respect to the instant claims have been considered but are moot in view of the new ground(s) of rejection. Applicant argues that the Toguchi reference does not expressly disclose the compounds of the present claims. Toguchi does disclose formula II-1, which renders obvious the compounds found in the present claims. Toguchi discloses

Art Unit: 1774

Toguchi discloses substitutions that can be hydrogen; substituted or unsubstituted alkoxy groups and substituted or unsubstituted aromatic heterocycle. It would be obvious to make the necessary substitutions in order to improve the luminescence.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Camie S. Thompson whose telephone number is (571) 272-1530. The examiner can normally be reached on Monday through Friday from 7:30 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached at (571) 272-1398. The fax phone number for the Group is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DRIMINER EY AMINER